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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,194	06/24/2004	Takamasa Harada	2574.0030000/JMC/ASL	9228

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EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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02/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/500,194	Applicant(s) HARADA ET AL.	
	Examiner Katarzyna Wyrozebski	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

In view of applicant's response dated 11/29/2007 following office action is final. Applicants' arguments have been considered but are not persuasive. All rejections of record are incorporated here by reference. Examiner acknowledges cancellation of claim 9.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-6, 8, 10, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by SCHMIDT (US 6,236,493).

The discussion of the disclosure of the prior art of SCHMIDT from paragraph 4 of the office action dated 5/29/07 is incorporated here by reference.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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4. Claims 1-8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHMIDT (US 6,236,493) in view of either JP 2000-302960 (Abstract) or BLANK (US 3,787,378).

The discussion of the disclosure of the prior art of SCHMIDT and either JP'960 or BLANK from paragraph 8 of the office action dated 5/29/07 is incorporated here by reference.

Response to Applicant's Arguments

In their response dated 11/29/2007 applicants argued following:

a) The prior art of SCHMIDT does not apply as 102(b) reference since it is less than a year from applicant's earliest priority date.

Per MPEP 2133:

THE 1-YEAR TIME BAR IS MEASURED FROM THE U.S. FILING DATE

If one discloses his or her own work more than 1 year before the filing of the patent application, that person is barred from obtaining a patent. *In re Katz*, 687 F.2d 450, 454, 215 USPQ 14, 17 (CCPA 1982). The 1-year time bar is measured from the U.S. filing date. Thus, applicant will be barred from obtaining a patent if the public came into possession of the invention on a date before the 1-year grace period ending with the U.S. filing date. It does not matter how the public came into possession of the invention. Public

The instant invention was filed in the United States in 2004, with 371 dating back to 2003.

Disclosure of SCHMIDT was published in 2001, hence it is more than one year from the date present invention was filed in the US.

b) The prior art of SCHMIDT discloses liquid material phase, which permits adequate diffusion of Nanoparticles, hence the prior art of SCHMIDT does not teach that solid or gel would be suitable as matrix phase.

With respect to the above argument, the applicants are directed to Abstract of the disclosure of SCHMIDT, wherein the second line indicates that the matrix is solid. Second, the polymers listed in SCHMIDT as well as those listed in claim 2 of the instant invention are solids at room temperature, unless dissolved by solvent. Solubility of the polymer is also mentioned by the applicants' claims.

Argument regarding viscosity of the composition is considered, however it is not commensurate with the scope of the claims. Nowhere in at least independent claims do applicants disclose limitation of viscosity.

c) The prior art of SCHMIDT teaches away from use of liquid matrix phase, since matrix phase of SCHMIDT must have low viscosity to permit diffusion of nanoscale particles.

Again, the Abstract of SCHMIDT clearly indicates that particles are dispersed in liquid curable matrix material. Since polymers such as PVOH or polyacrylic acid mentioned in SCHMIDT are solids at room temperature the use of solvents is implied. Again, viscosity is not a limitation set forth in applicant's claims.

d) Present claims require 4.9-95.9 wt % of soluble polymer, which is not taught by the disclosure of SCHMIDT.

First – the present claims recite "soluble polymer" and not that the polymer is in solution or actually dissolved. This statement is viewed more like an ability of the polymer to dissolve than a limitation which could bar disclosure of SCHMIDT from being applied against present claims.

Second—per applicants own claims solvent is an optional component

Third – the polymers of SCHMIDT fully encompass polymers disclosed by the applicants in their claim 2, therefore since polymers are the same, the effect of using them such gelling or being solid should also be the same.

Fourth - the amount of the soluble polymer can be minimal, which is 4.9 wt %, which would result in major amounts of silane based compound and optionally acrylic monomers.

e) The applicants stated that "...the person of ordinary skill in the art would expect that the addition of polymer to a liquid phase would increase the viscosity of the liquid phase, person of ordinary skill in the art would have no reason to add a polymer to the matrix phase disclosed by SCHMIDT, because SCHMIDT explicitly discloses that this would be undesirable...."

The examiner requests that the applicants clarify their argument, since it is not clear as to what exactly applicants are arguing. The prior art of SCHMIDT clearly indicates that polymers are added to the cured matrix and lists polymers that encompass all species listed in instant claim 2 with acrylics being preferred.

Again viscosity is not a limitation and it also viewed as very subjective and applicants statements are more of an opinion or speculation since there is no number that the applicants can use to say that disclosure of SCHMIDT is has too low viscosity when compared to the invention

at hand. What may seem suitable for SCHMIDT for migration of nanoparticles, does not mean that it does not apply against present claims.

f) The applicants have argued that the examiner has not established prima facie obviousness why plasticizers and softeners should be utilized in teachings of SCHMIDT that does not even disclose a polymer.

Well, first the prior art of SCHMIDT teaches in col. 6, that customary additives can be added to the dispersion. One of ordinary skill in the art knows that softeners and plasticizers are customary additives. The examiner would like to point out that these additives are optional component in independent claim 1.

Second – as it was mentioned earlier the polymers are taught and disclosed in SCHMIDT (see col. 3), so yes, SCHMIDT has polymers. Specifically, SCHMIDT teaches polymers that will result in transparent composition and, which can be cured thermally or photochemically.

Third – the prior art of SCHMIDT and BLANK or JP’960 are in the same field of endeavor, which is making plastic optical lenses and films.

(“[I]t is proper to take into account not only specific teachings of the references but also the inference which one skilled in the art would reasonable be expected to draw therefrom ...”). The analysis supporting obviousness, however, should be made explicit and should “identify reason that would have prompted a person of ordinary skill in the relevant field to combine elements” in manner claimed. *KSR*, 127 S. Ct. at 1739, 82 USPQ2d at 1396.

In the instant case, when making plastic lenses, lack of softeners or plasticizers could result in an article that is too brittle and can crack easily, which addition is viewed as common

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sense to one having ordinary skill in the art. The reasons for using plasticizers in general is to both facilitate processing and increase flexibility and toughness of the final product by internal modification (salvation) of the polymer molecule. The latter is held together by secondary valence bonds. Among plasticizers many of them are liquids. Softeners are incorporated to increase dispersion of the fillers and facilitate processing. Softeners can be oils or compounds such as stearic acid, and their effect is often achieved by emulsification. One of ordinary skill in the art knows the effects of these two additives and would make determination how much and if to add them based on the intended use of the final optical lens. For example, eye lenses have to have different degree of elasticity and flexibility.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 8:30 AM-2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Katarzyna Wyrozebski/
Primary Examiner, Art Unit 1796

January 31, 2008